

### **REMARKS**

Applicant thanks the Examiner for total consideration given the present application. Claims 1-22 were pending prior to the Office Action. Claims 1, 2, 5, 7, 10-13, 16, 18, 21, and 22 have been amended and claims 3 and 14 have been canceled through this Reply. Therefore, claims 1, 2, 4-13, and 15-22 remain pending. Claims 1 and 12 are independent. Favorable reconsideration and allowance of the present application are respectfully requested in view of the following remarks.

#### **35 U.S.C. § 112, 2ND PARAGRAPH REJECTION**

Claims 1 and 12 stand rejected under 35 U.S.C. § 112, second paragraph, as allegedly being indefinite.

Initially, Applicant disagrees with the Examiner's assertion that the term "a plurality of objects" renders the claims indefinite due to lack of antecedent basis.

Applicant respectfully submits that the Examiner's focus during examination for compliance with the requirement of definiteness in § 112, 2nd paragraph is whether the claim meets the threshold requirements of clarity and precision. To do this, the Examiner needs only ensure that the claims define the invention with a reasonable degree of particularity and distinctness. See MPEP § 2173.02.

Although Applicant does not necessarily agree with the Examiner's assertion of indefiniteness, Applicant has amended claims 1 and 12 to include, *inter alia*, "the images of the isolated faces" in order to expedite prosecution. Therefore, applicant respectfully requests that the Section 112, second paragraph rejection of claims 1 and 12 be withdrawn.

#### **35 U.S.C. § 102 REJECTION – ZHANG ET AL.**

Claims 1, 4, 5, 10, 12, 15, 16, and 21 stand rejected under 35 U.S.C. § 102(e) as allegedly being anticipated by Zhang et al. (USPN 2004/0264780) (hereinafter "Zhang"). Applicant respectfully traverses this rejection.

For a Section 102 rejection to be proper, the cited reference must teach or suggest each and every claimed element. *See M.P.E.P. 2131; M.P.E.P. 706.02*. Thus, if the cited reference

fails to teach or suggest one or more elements, then the rejection is improper and must be withdrawn.

In this instance, Zhang fails to teach or suggest each and every claimed element. For example, independent claim 1 recites, *inter alia*, “A computer-based method for organizing digital photos, comprising: ... extracting faces from a plurality of digital photos; cropping said plurality of digital photos to generate images of isolated faces; *applying a face recognition algorithm to determine the similarity of isolated faces with a reference model; displaying the images of isolated faces arranged as a function of the determined similarity*; and receiving user input to associate said faces with a particular classification.” *Emphasis added.*

Zhang merely teaches a photo management method, which detects faces from an image (paragraph [0044]). Zhang’s method also includes a facial extraction process (paragraphs [0045], [0048]). The Office Action alleges that Zhang teaches a method for organizing digital photos where the method includes extracting objects of interest and cropping digital photos to generate images of isolated objects of interest (paragraph [0083]). In addition, Zhang applies probabilistic determination such as a maximum a posteriori (MAP) estimation to determine a similarity between extracted features and a candidate model (paragraph [0051]). However, Zhang fails to teach or suggest that the results of applying a face recognition algorithm to determine the similarity of isolated faces with a reference model are used to “*display the images of isolated faces arranged as a function of the determined similarity.*” In contrast, Zhang merely classifies labeled or unlabeled faces extracted from the input images by comparing to the candidate model.

In addition, the Office Action acknowledges that Zhang merely outputs candidate name list without displaying the extracted face images in order or similarity. The Office Action further alleges that the displaying is obvious. However, the applicant disagrees with the Office Action. Nowhere does Zhang teach or suggest “*displaying the images of isolated faces arranged as a function of the determined similarity.*”

Similarly, claim 12 is directed to an apparatus including some of the features in claim 1. Therefore, for at least these reasons, independent claims 1 and 12 are distinguishable from Zhang. Claims 3-5, 10, 14-16, and 21 depend from claims 1 and 12, directly or indirectly.

Therefore, for at least the reasons stated with respect to claims 1 and 12, claims 3-5, 10, 14-16, and 21 are also distinguishable from Zhang.

Accordingly, Applicant respectfully requests that the rejection of claims 1, 3-5, 10, 12, 14-16, and 21, based on Zhang, be withdrawn.

35 U.S.C. § 103 REJECTION – ZHANG IN VIEW OF HANNA ET AL.

Claims 2, 6-8, 13, and 17-19 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Zhang in view of Hanna et al. (USPN 6,714,665) (hereinafter “Hanna”). Applicant respectfully traverses.

For a Section 103 rejection to be proper, a *prima facie* case of obviousness must be established. *See M.P.E.P. 2142*. One requirement to establish *prima facie* case of obviousness is that the prior art references, when combined, must teach or suggest all claim limitations. *See M.P.E.P. 2142; M.P.E.P. 706.02(j)*. Thus, if the cited references fail to teach or suggest one or more elements, then the rejection is improper and must be withdrawn.

As presented above, Zhang fails to teach or suggest that the results of applying a face recognition algorithm to determine the similarity of isolated faces with a reference model are used to “*display the images of isolated faces arranged as a function of the determined similarity*.” In addition, Hanna fails to teach or suggest the above limitation to supplement Zhang’s missing feature.

As set forth on page 6 of the Office Action, the Examiner relies on Hanna as allegedly pertaining to incremental features of the above listed dependent claims. The Examiner’s reliance on Hanna, however, fails to make up for the deficiencies of Zhang discussed above with respect to claims 1 and 12. Therefore, the asserted combination of Zhang and Hanna (assuming these references may be combined, which applicant does not admit) fails to establish *prima facie* obviousness of any pending claims. Therefore, for at least these reasons, claims 2, 6-8, 13, and 17-19 are distinguishable from the combination of Zhang and Hanna. Applicant respectfully requests that the rejection of claims 2, 6-8, 13, and 17-19, based on Zhang and Hanna, be withdrawn.

35 U.S.C. § 103 REJECTION – ZHANG AND HANNA FURTHER IN VIEW OF MATHE

Claims 9 and 20 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Zhang and Hanna further in view of Mathe (USPN 2005/0060636) (hereinafter “Mathe”). Applicant respectfully traverses.

As presented above, Zhang and Hanna fails to teach or suggest that the results of applying a face recognition algorithm to determine the similarity of isolated faces with a reference model are used to “*display the images of isolated faces arranged as a function of the determined similarity.*” In addition, Mathe fails to teach or suggest the above limitation to supplement Zhang and Hanna’s missing feature.

As set forth on page 9 of the Office Action, the Examiner relies on Mathe as allegedly pertaining to incremental features of the above listed dependent claims. The Examiner’s reliance on Mathe, however, fails to make up for the deficiencies of Zhang and Hanna discussed above with respect to claim 1, 6, 12, and 17. Therefore, the asserted combination of Zhang, Hanna, and Mathe (assuming these references may be combined, which applicant does not admit) fails to establish prima facie obviousness of any pending claims.

35 U.S.C. § 103 REJECTION – ZHANG IN VIEW OF NEFF ET AL.

Claims 11 and 22 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Zhang in view of Neff et al. (USPN 6,751,780) (hereinafter “Neff”). Applicant respectfully traverses.

As presented above, Zhang fails to teach or suggest that the results of applying a face recognition algorithm to determine the similarity of isolated faces with a reference model are used to “*display the images of isolated faces arranged as a function of the determined similarity.*” In addition, Neff fails to teach or suggest the above limitation to supplement Zhang’s missing feature.

As set forth on page 9 of the Office Action, the Examiner relies on Neff as allegedly pertaining to incremental features of the above listed dependent claims. The Examiner’s reliance on Neff, however, fails to make up for the deficiencies of Zhang discussed above with respect to claims 1 and 12. Therefore, the asserted combination of Zhang and Neff (assuming these

references may be combined, which applicant does not admit) fails to establish prima facie obviousness of any pending claims.

Conclusion

In view of the above remarks, it is believed that claims are allowable.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact D. Richard Anderson Reg. No. 40,439 at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37.C.F.R. §§1.16 or 1.14; particularly, extension of time fees.

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Respectfully submitted,

By 

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